

## REMARKS

Claims 1 and 27-29 are herein amended. Claim 12 is herein canceled. Thus, claims 1-11, 13, 14 and 27-29 are pending and under consideration and stand rejected under 35 USC § 103. The rejections are respectfully traversed below.

### Examiner Interview

The Applicant thanks the Examiner for granting an in-person Interview on June 29, 2006. The Applicant acknowledges with appreciation the indication by the Examiner during the Interview that "adding 'neural network' terminology to the independent claims to further explain the statistical estimator would avoid the Waclawsky reference" (See Interview Summary, page 3). Also, during the Interview, the Examiner recommended "more clearly defining the training of the statistical estimator and the actual processes of the statistical estimator" (Interview Summary, page 3). Thus, the claims have been amended based on the Examiner's recommendations.

### Rejections under 35 USC § 103

On pages 3-7 of the December 20, 2005 Office Action, claims 1-14 and 27-29 were rejected under 35 USC § 103(a) as unpatentable over Waclawsky (US Patent 5,974,457) in view of Ramanathan (US Patent 6,286,047).

Claim 1 recites "a neural network as the statistical estimator" (claim 1, lines 9-10) and coinciding with the specification at paragraphs [0051]; [0071] – [0072] and [0074] – [0075].

What was cited in cited in Waclawsky describes:

comparison is performed by the rules contained in the rule based criteria modules 150. The standards can be predetermined, predefined standards such as average utilization for particular types of traffic such as batch traffic, interactive traffic, voice traffic or video traffic. Another important type of standard is the benchmark data set which is the accumulated history of behavior of traffic on the network.

In other words, what was cited in Waclawsky describes a rule based system and a historical benchmark comparison system, not "a neural network as a statistical estimator" as recited in claim 1.

Nothing was cited or found in Waclawsky and Ramanathan either combined together or taken individually that teaches or suggests "a neural network as a statistical estimator" as recited in claim 1. Instead, Waclawsky discloses a rule based system. A rule based system is not the same as neural network. Rule based systems are also known as expert systems and consist of

a number of manually defined rules representing expert knowledge. In contrast, a neural network, does not require explicit knowledge of an expert. Rather, the neural network represents the required knowledge after training in implicit form. Thus, by relying on a rule based system, Waclawsky teaches away from a neural network training system.

Furthermore, the Office Action failed to establish a case of *prima facie* obviousness because nothing was cited or found that teaches or suggests that at the time of the invention, one of ordinary skill in the art would have been motivated to combine the teachings of Ramanathan with the disclosure of Waclawsky or to modify Waclawsky or Ramanathan to derive the missing limitations admittedly not found in Waclawsky. The Office Action merely concluded that Waclawsky and Ramanathan in some "combination satisfies the need [of] a network monitoring system that can generate models of services based on dependencies among the services and service elements. See Ramanathan, column 3, lines 38-42" (Office Action, page 4, lines, 17-20).

For the above reasons, independent claim 1 distinguishes over the applied art and is in condition for allowance.

Dependent claims 2-11, 13 and 14 depend from claim 1. Independent claims 27-29 recite neural network limitations in a manner similar to claim 1. Thus, claims 2-11, 13, 14 and 27-29 distinguish over the applied art for the reasons discussed in regard to claim 1.

Furthermore, the Office Action failed to establish a case of *prima facie* obviousness because nothing was cited or found that teaches or suggests that at the time of the invention, one of ordinary skill in the art would have been motivated to combine the teachings of Ramanathan with the disclosure of Waclawsky or to modify Waclawsky or Ramanathan to derive the missing limitations admittedly not found in Waclawsky. The Office Action merely concluded that Waclawsky and Ramanathan in some "combination satisfies the need [of] a network monitoring system that can generate models of services based on dependencies among the services and service elements. See Ramanathan, column 3, lines 38-42" (Office Action, page 4, lines, 17-20). Thus, for these additional reasons, claim 27 distinguishes over the applied art.

## Summary

It is submitted that the references cited by the Examiner, taken individually or in combination, do not teach or suggest the features of the present claimed invention. Thus, it is submitted that claims 1-11, 13, 14 and 27-29 are in condition suitable for allowance. Reconsideration of the claims and an early Notice of Allowance are earnestly solicited.

If there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

Finally, if there are any additional fees associated with filing of this Response, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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